Kurt Snipes, PhD

Chief, Chronic Disease
Surveillance and Research Branch

CDPH
California Department of
PublicHealth

The 80% by 2018 Call to Action

Shared goal of reaching 80% of adults aged 50 and older screened for CRC by 2018

CDPH Dress in Blue Day
March 4, 2016

CDPH California Department of PublicHealth

Agenda

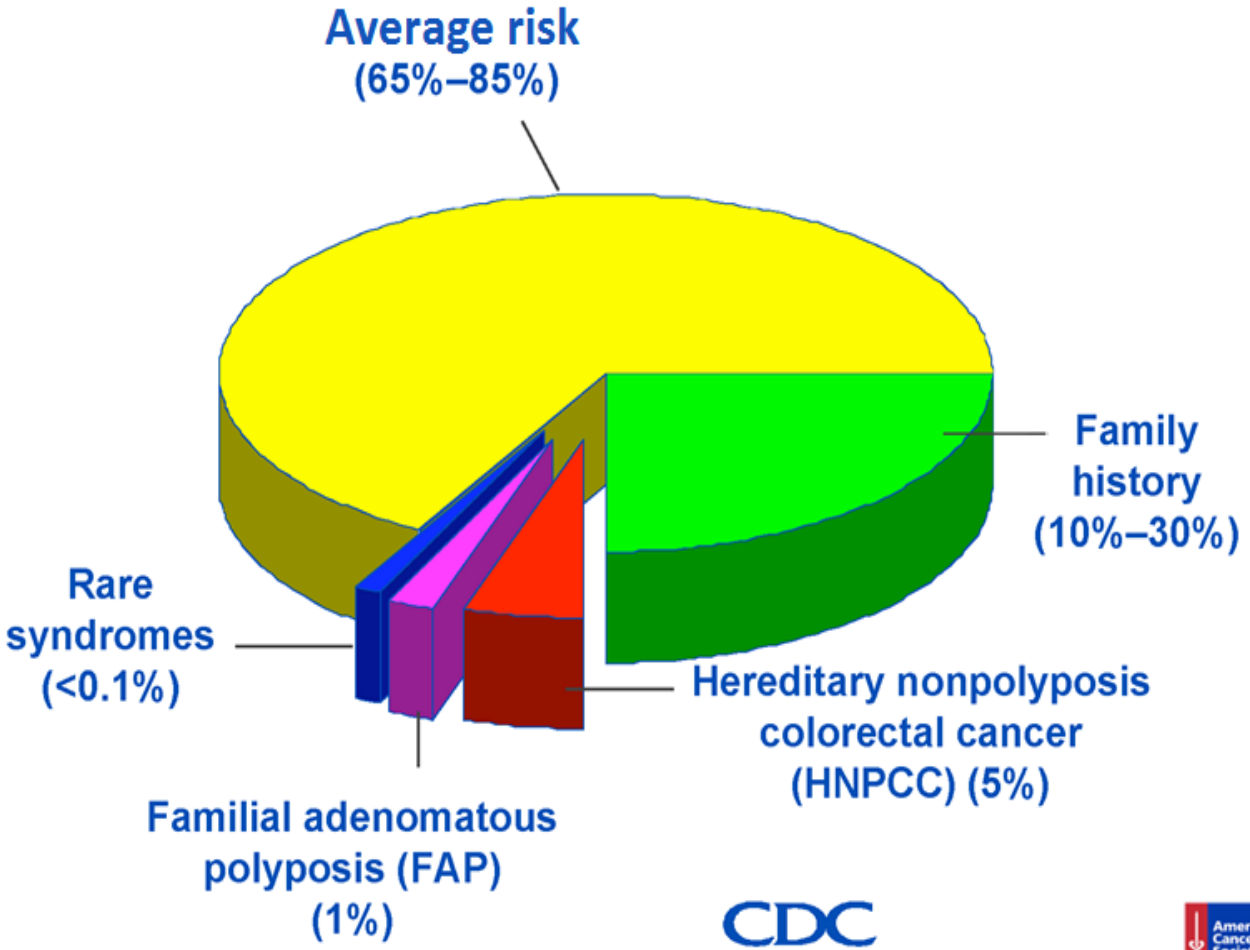
- Overview of Colorectal Cancer & Screening
- CDPH Programs focused on Colorectal Cancer
- Late Stage Diagnosis of Colorectal Cancer in California
- California Cancer Registry Overview and Services

Colorectal Cancer

Sandra Robinson, MBA

Director, California Colorectal Cancer Control Program (C4P)

Who gets Colorectal Cancer (CRC)?



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CDC CENTERS FOR DISEASE CONTROL AND PREVENTION

American Cancer Society

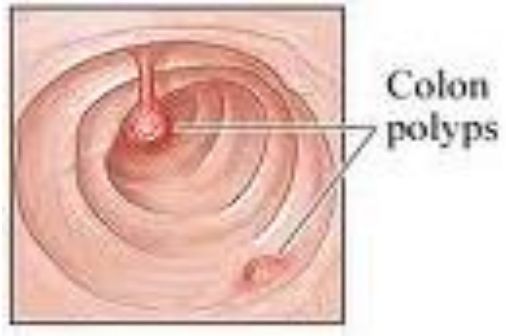
ment of Public Health

TRUE OR FALSE?

You can stop CRC before it starts

TRUE

CRC usually starts from polyps in the colon or rectum. Over time, some polyps can turn into cancer. If detected early through routine screenings, those polyps can be removed during colonoscopy before they become cancer.

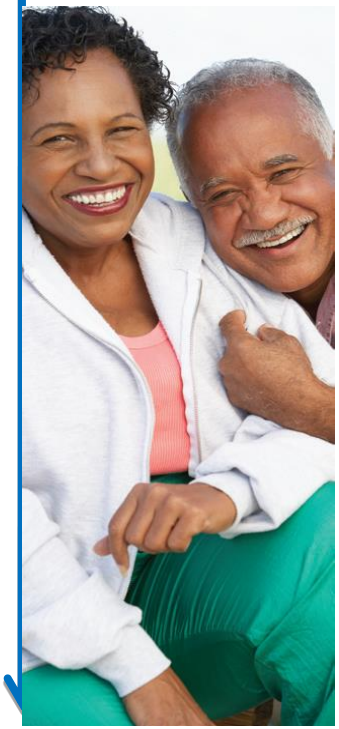


TRUE OR FALSE?

CRC often starts

with no symptoms

TRUE



People who have polyps or colorectal cancer don't always have symptoms, especially at first. Someone could have polyps or colorectal cancer and not know it.

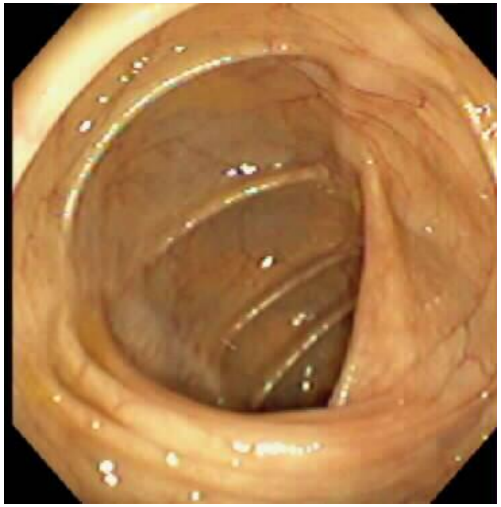
TRUE OR FALSE?

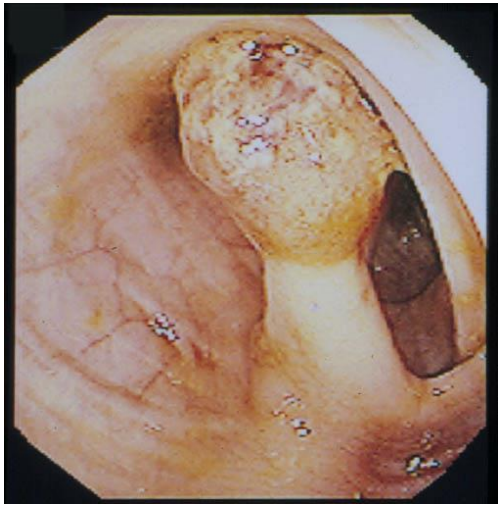
Smoking and alcohol consumption will not put me at risk for colorectal cancer

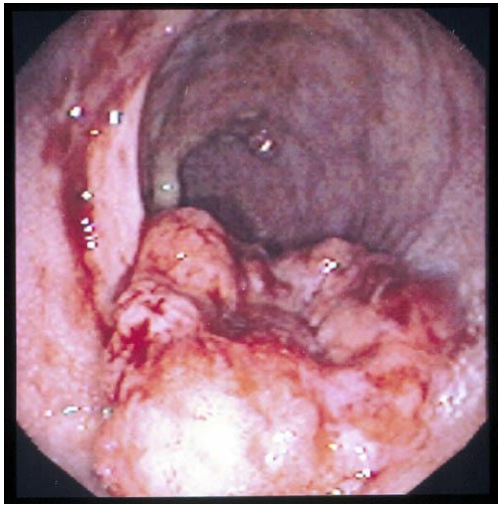
FALSE

Actually, smoking and alcohol consumption are risk factors for colorectal cancer. And, physical inactivity, a diet high in fat and/or red meat, inadequate intake of fruits and vegetables, and obesity put an individual more at risk for colorectal cancer.

Progression of Disease







Normal → to → Adenoma → to → Carcinoma

Adapted from: American Cancer Society (ACS)

What is the bad news?

- 4th most common cancer: 14,114 cases in 2012
- 2nd leading cause of cancer deaths in all Californians, men and women combined, (5,189 deaths) exceeded only by lung cancer (12,463 deaths) in 2012
- Colon cancer early stage diagnosis is still too low 42% compared to 71% for breast cancer and 93% for prostate

California Facts & Figures 2015

What are risk factors I cannot change?

- **Age**
- **Gender**
- **Race/Ethnicity**
- **Family history of inflammatory bowel disease (IBD), adenomatous polyps or CRC**
- **Genetics**

What is the good news?

CRC is one of the most preventable cancers through screening, early detection and treatment

Cancer Statistics, 2013. CA Cancer J. Clin. 2013 63 (1):12

What are risk factors I can change?

- **Physical Inactivity**
- **Obesity**
- **Tobacco Use**
- **Heavy Alcohol Use**

What can I AVOID to decrease the risk of CRC?

Frequent Consumption of Red Meat

Poor Choices for Colon Health

Obesity

Alcohol

Smoking

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What can I DO to decrease the risk of CRC?

Magnesium-rich Foods

Good Choices for Colon Health

Physical Activity

Garlic

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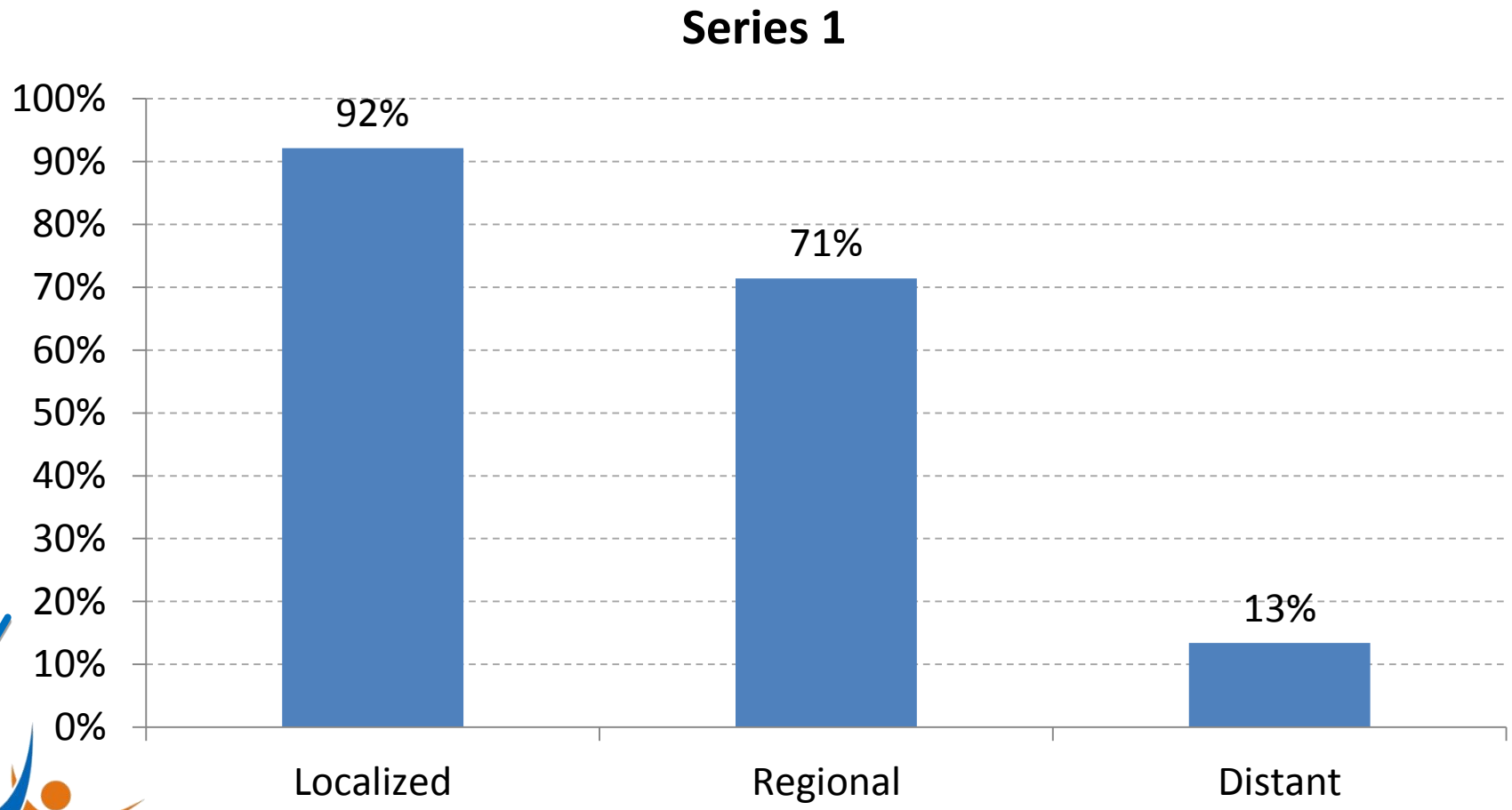
Why should I be screened for CRC ?

- **Cancer Prevention: Removal of pre-cancerous polyps prevents cancer**
- **Improved Survival: Early detection markedly improves chances of long term survival**

CRC in California-5 Year Survival Rate

2003-2012 California Cancer Registry Data



When Should I Begin to Get Screened for CRC?

- **For those at average-risk, CRC screening should begin at age 50**
- **Continue getting screened at regular intervals**
- **You may need to be tested earlier than 50 or more often than other people if—**

Why Might I Need to Get Screened Before 50?

- **You or a close relative have had colorectal polyps or CRC.**
- **You have inflammatory bowel disease.**
- **You have genetic syndromes such as familial adenomatous polyposis (FAP) or hereditary non-polyposis CRC**

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What Screening Tests Are Recommended?

The U.S. Preventive Services Task Force recommends CRC screening for men and women aged 50–75 using one of the following:

- **High-sensitivity fecal occult blood testing (FOBT)**
- **Sigmoidoscopy**
- **Colonoscopy**

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Fecal Immunochemical Test (FIT)

- **FIT is a second-generation FOBT**
- **Specific for human blood and lower GI tract bleeding**
- **Results not influenced by foods or medications and does not require bowel preparation**
- **Can be provided at office visit or mailed to patient**
- **Recommended yearly**

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Health

FIT Advantages

- **Cost is low compared with other colorectal cancer screening tests.**
- **There is no risk of damage to the lining of the colon.**
- **No sedation is needed.**
- **Results not influenced by foods or medications and does not require bowel preparation.**
- **Can be picked up during an office or lab visit, or mailed to patient.**
- **Samples can be collected at home.**

Segnan, Gastro. 2007;132:2304-2312
Personal correspondence 2007 SCPMG
Church, J Natl Cancer Inst. 2004;96:770-780

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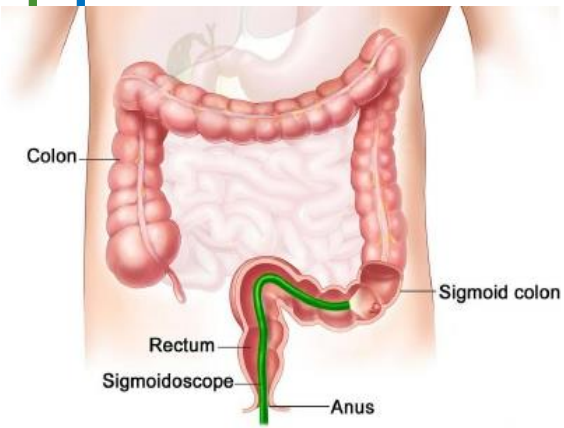
Flexible Sigmoidoscopies



A short, thin, flexible, lighted tube is put into the rectum in order to check for polyps or cancer inside the rectum and lower third of the colon.

- **Requires partial bowel preparation and sedation may not be required**
- **Can biopsy and remove polyps**
- **Should be done every five years, with FIT every three years.**

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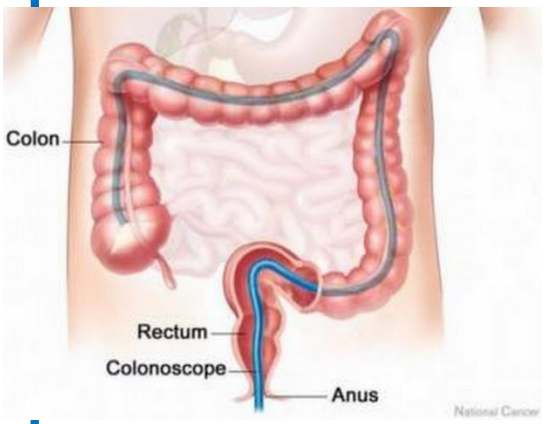
Colonoscopy



This is similar to flexible sigmoidoscopy, except a longer tube is used to check for polyps or cancer inside the rectum and the entire colon.

- **Requires complete bowel preparation and sedation**
- **Can biopsy and remove polyps**
- **Should be done every 10 years**

Colorectal Cancer Screening Saves Lives

CRC is the second leading cancer killer for men and women combined
— but it doesn't have to be -

Get screened with the FIT test. Talk to your doctor.

Screen for Life
National Colorectal Cancer Action Campaign

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http://www.cdph.ca.gov/programs/Pages/C4P.aspx
or http://www.cdc.gov/cancer/colorectal/basic_info/index.htm

CRC Screening Saves Lives

Unlike many other cancers, CRC is highly preventable, treatable, and beatable, *but only with proper screening*.

CDPH Programs Focused on Colorectal Cancer

Shauntay Davis, MPH
Program Director
California's Comprehensive Cancer Control Program

Comprehensive Cancer Control
Collaborating to Conquer Cancer

Screen for life
California Colon Cancer Control Program
Funded by the Centers for Disease Control and Prevention

Searching for Causes & Cures
CCR
KEN MADDY
CALIFORNIA CANCER REGISTRY
CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

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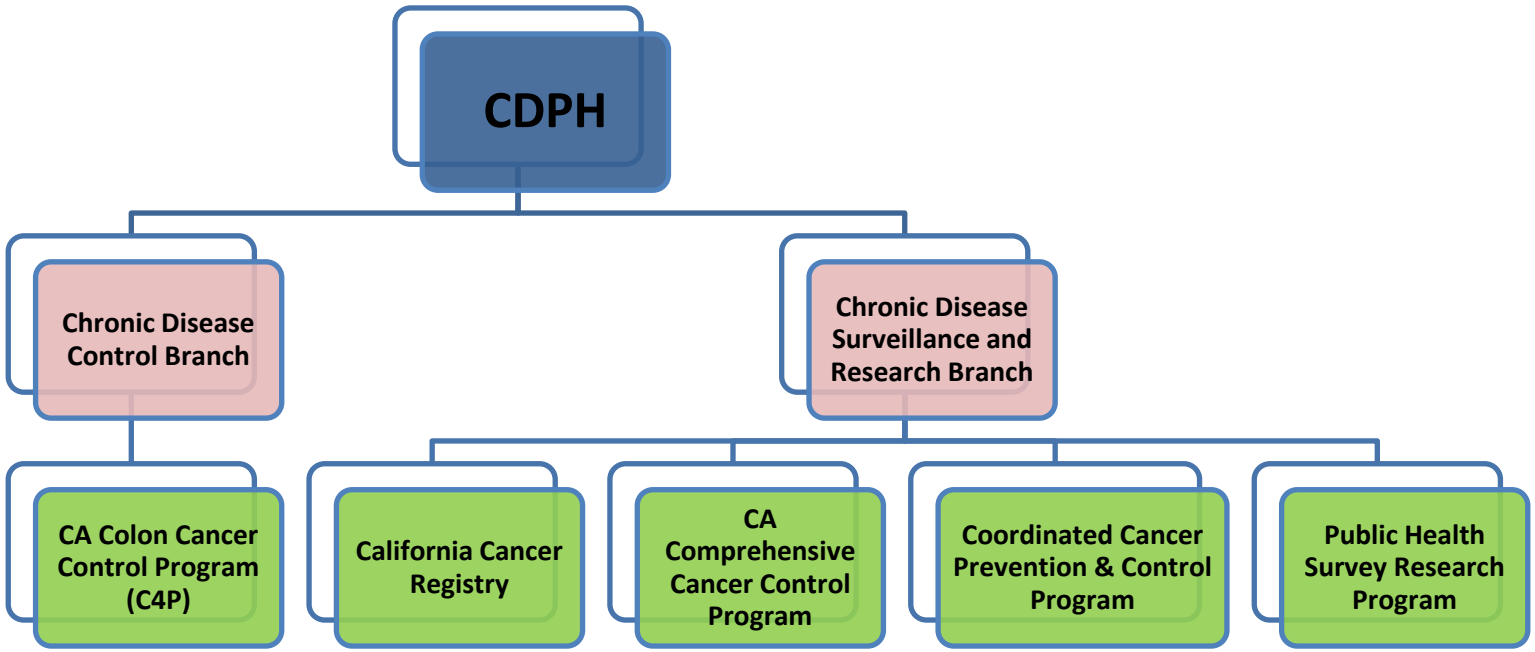
CDPH Programs Focused on Colorectal Cancer



California Colon Cancer Control Program (C4P)

Sandra Robinson, MBA
California Colorectal Cancer Control Program (C4P)
California Department of Public Health

Screen for life
California Colon Cancer Control Program
Funded by the Centers for Disease Control and Prevention

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C4P Mission

The California Colon Cancer Control Program (C4P) focuses on the following:

- Community outreach and education.
- Professional education for medical providers.
- Collaboration and partnerships with health care delivery systems, health care providers, health insurers, and key stakeholders to increase colorectal cancer screening.

NOTE: C4P does not provide financial assistance, colonoscopies, or other CRC screenings.

C4P Activities

Evidence-based interventions recommended by the ***Community Guide*** for CRC screening activities:

1. Client reminder systems
2. Provider assessment and feedback
3. Provider reminder and recall systems
4. Reduce structural barriers

Priority Populations

- Men and women between the ages of 50 and 75 years
- Asymptomatic, low-income, uninsured or underinsured
- Racial and ethnic groups that are disproportionately affected

Focused Activities

- Colorectal cancer screening initiative
- Professional education
- Collaboration with provider organizations, health insurers on CRC policies and messages
- Partnerships with Medi-Cal managed care plans
- Formal partnerships with federally qualified health centers to implement patient navigation services
- Promotion of public health evidence-based interventions

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Coordinated Cancer Prevention & Control Program (CCPCP)

Purpose of CCPCP

- To establish an efficient, effective and coordinated leadership structure among all state cancer and chronic disease programs
- To coordinate efforts among all cancer and chronic disease programs
- Facilitate activities in alignment with specific priorities in the state cancer plan

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CCPCP Advisory Committee

- California Cancer Registry (CCR)
- California Colon Cancer Control Program (C4P)
- Comprehensive Cancer Control Program (CCCP)
- Chronic Disease Control Branch - California Wellness Plan Implementation (CWPI)
- National Breast and Cervical Cancer Early Detection Program (NBCCEDP) - Every Woman Counts (EWC)
- Well-Integrated Screening and Evaluation for Women Across the Nation (WISEWOMAN)
- California Tobacco Control Program (CTCP)
- Public Health Survey Research Program (PHSRP)

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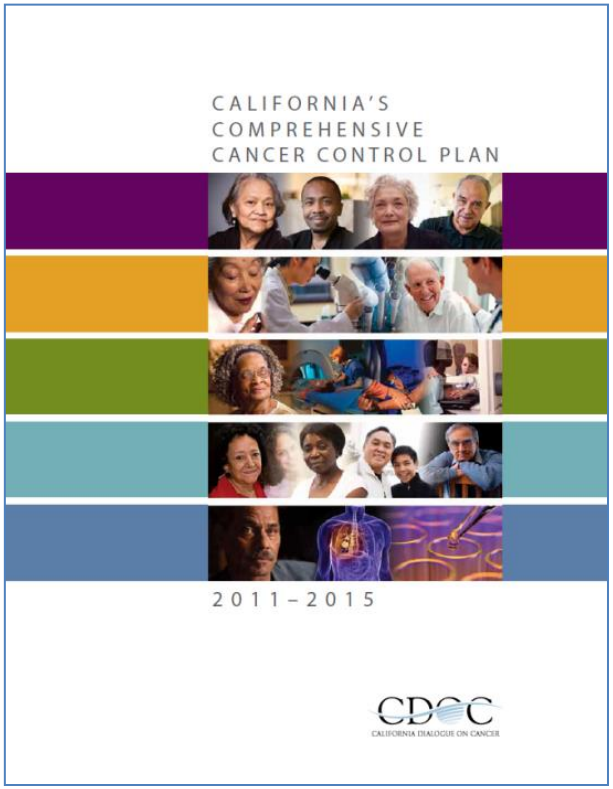
CCPCP Activities

- Program Leadership, Management, and Coordination
- Enhanced use of surveillance data
- Promotion of population-based cancer screening
- Coordination of Cancer Program Activities with Existing Cancer Coalition, California Dialogue on Cancer
- Alignment of Cancer Programs with state cancer plan

California's Comprehensive Cancer Control Program

Shauntay Davis, MPH

Program Director



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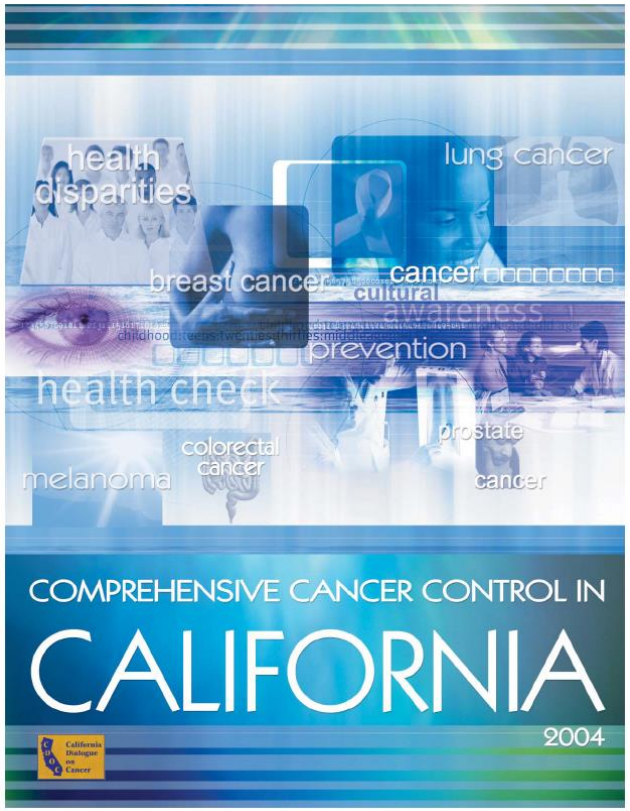
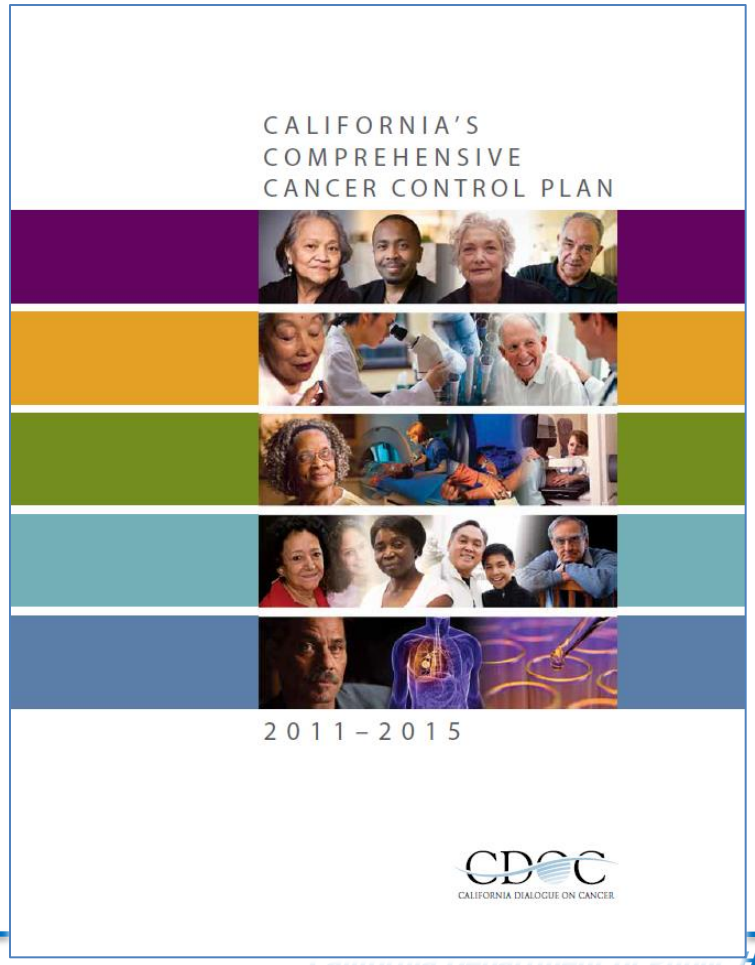
California's Comprehensive Cancer Control Program

California's Comprehensive Cancer Control Program (CCCP) is charged with:

- Establishing a cancer control coalition
  California Dialogue on Cancer (CDOC)
- Assessing the burden of cancer in California
- Developing and implementing a Comprehensive Cancer Control Plan for California





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Who is CDOC?

- CDOC is a dynamic coalition of individuals and organizations working together to reduce the burden of cancer in the state of California.

- Mission: To reduce cancer suffering and mortality in all populations in CA through primary prevention, early detection, better treatment and enhanced survivorship.

CALIFORNIA DIALOGUE ON CANCER
Preventing Cancer & Saving Lives through Collaboration

CDOC's BIG WIN!

Increase Colorectal Cancer Screening

- Efforts support National Colorectal Cancer Roundtable (NCCRT) 80% by 2018 initiative.

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Interested in becoming a CDOC Member?

Please join us as we strive to achieve the goals of *California's Comprehensive Cancer Control Plan, 2016-2020*.

Contact:

LeeAnn King

Coordination Support Specialist

Email: LeeAnn.King@cdph.ca.gov

Phone: 916-731-2530

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Public Health Survey Research Program

Public Health Survey Research Program (PHSRP)

- PHSRP oversees data collection operations and data management of the CA Behavioral Risk Factor Surveillance System (BRFSS) survey
- English/Spanish bilingual Computer Assisted Telephone Interview (CATI) call center housed at Sacramento State
- Supports a wide range of research methodologies

What is BRFSS

- **B**ehavioral **R**isk **F**actor **S**urveillance **S**ystem
- State-based, cross sectional, random-digit-dialed telephone survey conducted annually
- Non-institutionalized adults aged ≥ 18 years
- Collaboration between CDC and 50 US States/Territories
- California participation since 1984
- Monitors personal health behaviors that put health at risk

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Colorectal Cancer Screening Questions on BRFSS

- Collects data regarding the following colorectal cancer screening tests:
  - ✓ Fecal occult blood test within the past year
  - ✓ Sigmoidoscopy within the past 5 years
  - ✓ Colonoscopy with the past 10 years

How To Access BRFSS Data

- Access the Public Health Survey Research Program website www.csus.edu/research/phsrp
- Download data via secure link

Thank you

Shauntay Davis, MPH

Program Director

Comprehensive Cancer Control Program

California Department of Public Health

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Advanced Stage Colorectal Cancer in California Communities

Jennifer Rico, MA
California Cancer Registry
Chronic Disease Surveillance and Research Branch
California Department of Public Health

Overview

- California Cancer Registry (CCR)
- Colorectal cancer in California: State perspective
- Colorectal cancer in California: Local perspective

The California Cancer Registry

- Established by state law passed in 1985
- CCR has collected information on all new cancer cases and deaths for the entire state of California since 1988
- Hospitals and physicians are required to report cancer cases to the CCR

The California Cancer Registry

- The mission of the CCR is to serve the public by collecting statewide data, conducting surveillance and research into the causes, controls, and cures of cancer and communicating results to the public.
- CCR monitors the occurrence of cancer among Californians, both incidence (new diagnoses) and mortality (deaths).

State Perspective: Good News

Colorectal cancer incidence and mortality rates have declined dramatically in California since 1988

- Incidence rates dropped by 37%
- Mortality (death) rates dropped by 40%

State perspective: Bad News

Colorectal cancer mortality rates have declined among all major racial/ethnic groups – but the rate of decline is not equal

Non-Hispanic whites:	43% decline
African Americans:	27% decline
Asian/Pacific Islanders:	29% decline
Hispanics:	10% decline

The other bad news

Despite the availability of highly effective screening tests, over 50% of colorectal cancer cases in California are diagnosed late – after the disease has already spread beyond the colon or rectum, and survival rates drop.

State Perspective: Summary

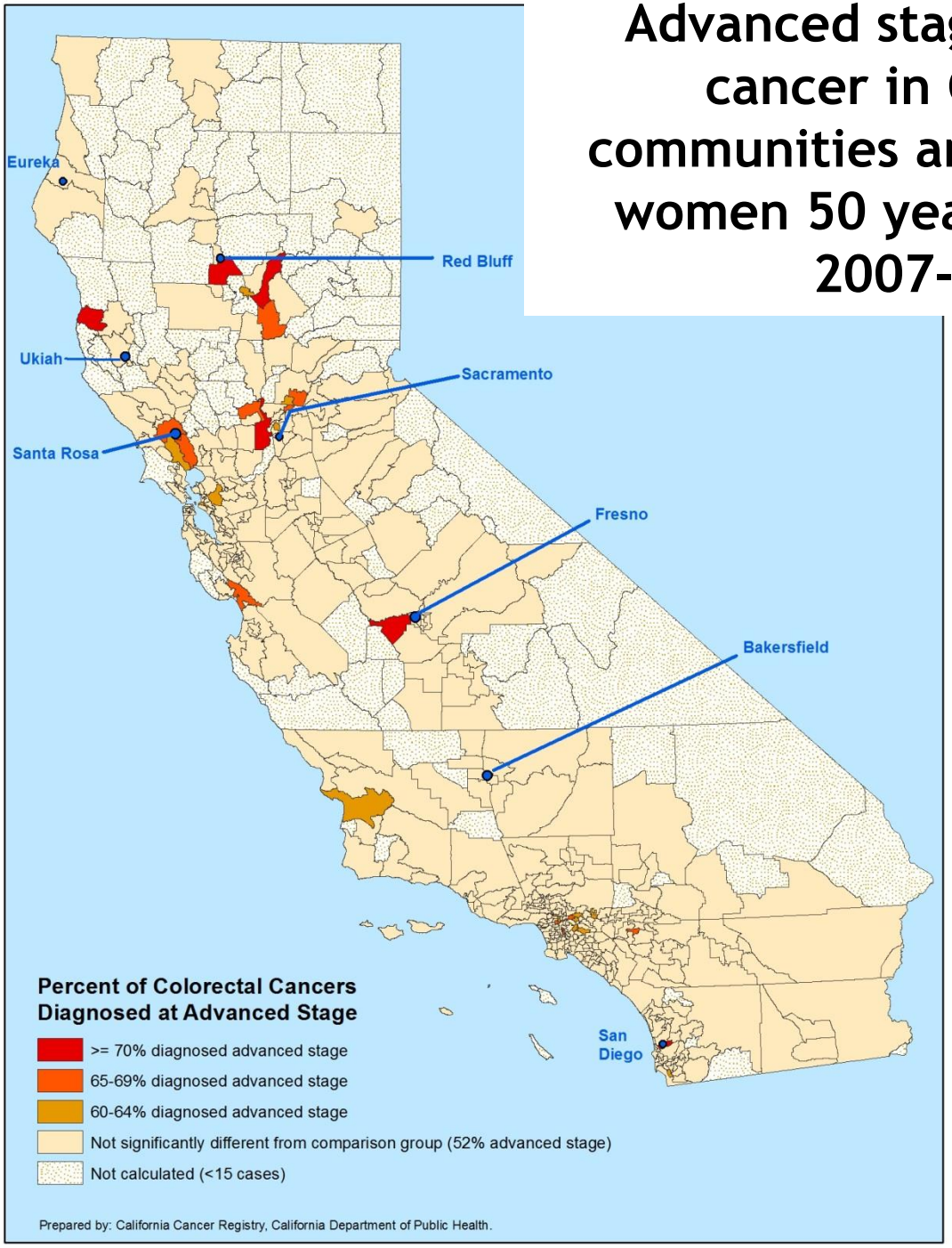
- Colorectal cancer incidence and mortality rates are declining overall in California, but not equally for all race/ethnic groups

- Earlier stage at diagnosis is associated with much improved chance of survival

Colorectal cancer in California: the local level

- Statewide statistics give an overview of colorectal cancer in California
- How can we help inform more targeted intervention?

Advanced stage colorectal cancer in California communities among men and women 50 years and older, 2007-2011



- Project initiated by CCR
- Identified Medical Study Service Areas (MSSA) throughout the state with higher than average (52%) advanced stage colorectal cancer
- Goal: Help to inform and assist more targeted colorectal screening interventions.

Patient Selection Criteria:

- Includes men and women who were:
  - Residents of California
  - Diagnosis years: 2007-2011
  - Ages 50+
  - Diagnosed with a cancer of the colon or rectum
  - n= 64,364

Community definition: MSSA

- MSSA: geographic unit defined by Office of Statewide Health Planning and Development (OSHPD) for determining medical shortage areas
- MSSAs are “rational service areas for healthcare” or “healthcare communities”
- 542 MSSAs in California based on Census 2010

Methodology

In each MSSA we analyzed:

- Out of all the colorectal cancer cases diagnosed during the five-year period, how many were diagnosed at late-stage (regional or distant stage)?

- How do those percents and numbers of late-stage colorectal cancer cases compare to a benchmark group?

Methods: the benchmark group

- Benchmark group included non-Hispanic whites living in high socioeconomic status neighborhoods statewide
- 52% of cases in benchmark group were diagnosed at advanced stage
- Selected because it is the demographic group with the lowest percent of advanced-stage colorectal cancer

Analysis

- We compared the proportion of advanced stage cases in each community with the proportion in our benchmark group

- We tested to see if the difference was statistically significant

Results: Summary

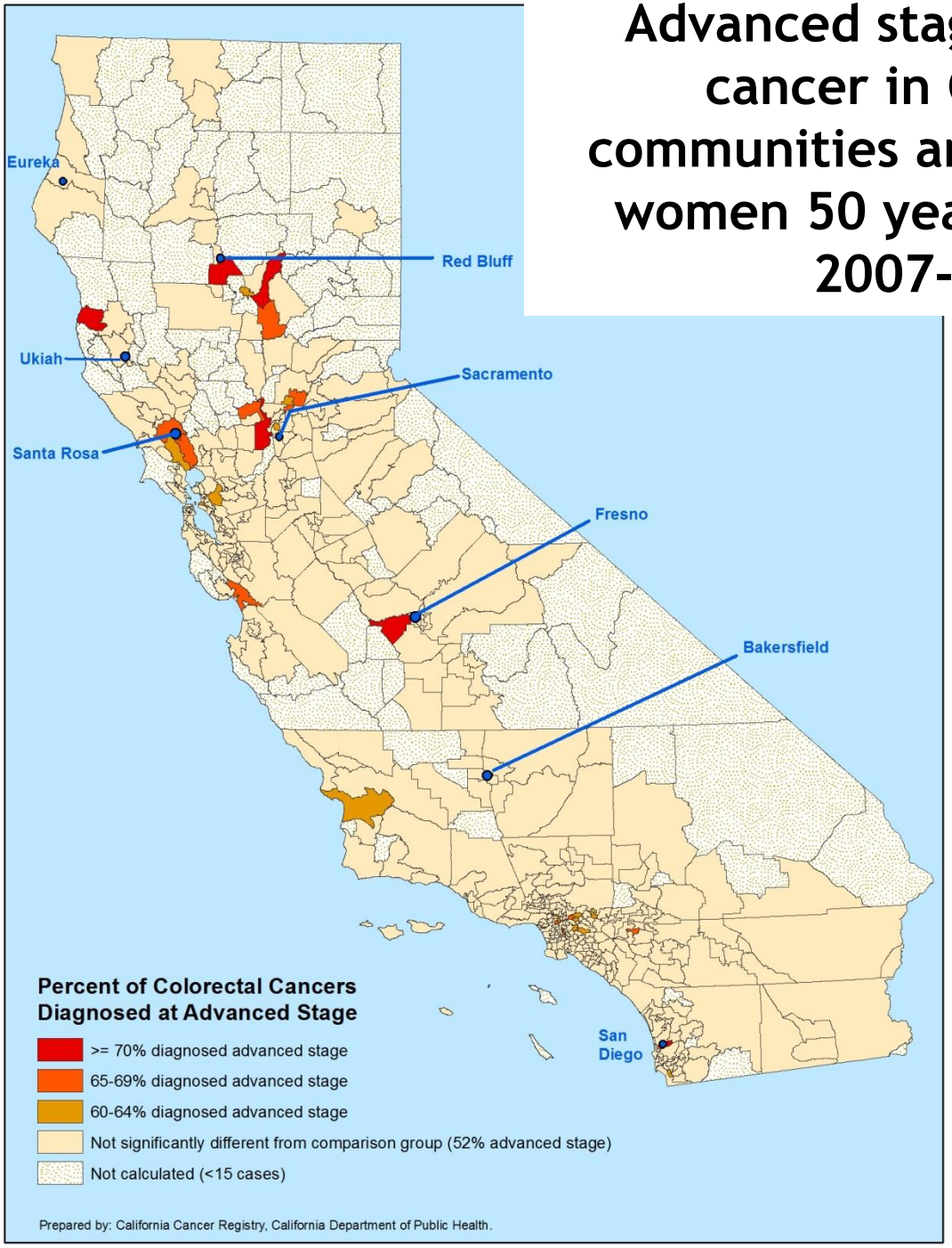
32 communities: Percent of advanced stage cases significantly higher than the benchmark group

- 6 communities: ≥70% advanced stage
- 11 communities: 65-69% advanced stage
- 15 communities: 60-64% advanced stage

408 communities: Percent of advanced stage cases was not significantly different from the benchmark group

102 communities: Too few cases to do calculation (< 15 cases in five-years)

Advanced stage colorectal cancer in California communities among men and women 50 years and older, 2007-2011



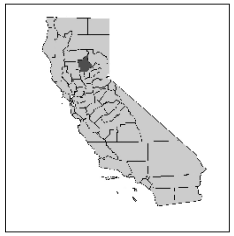
Dark red: 70% or more of cases diagnosed at advanced stage

Dark Orange: 65-69% of cases diagnosed at advanced stage

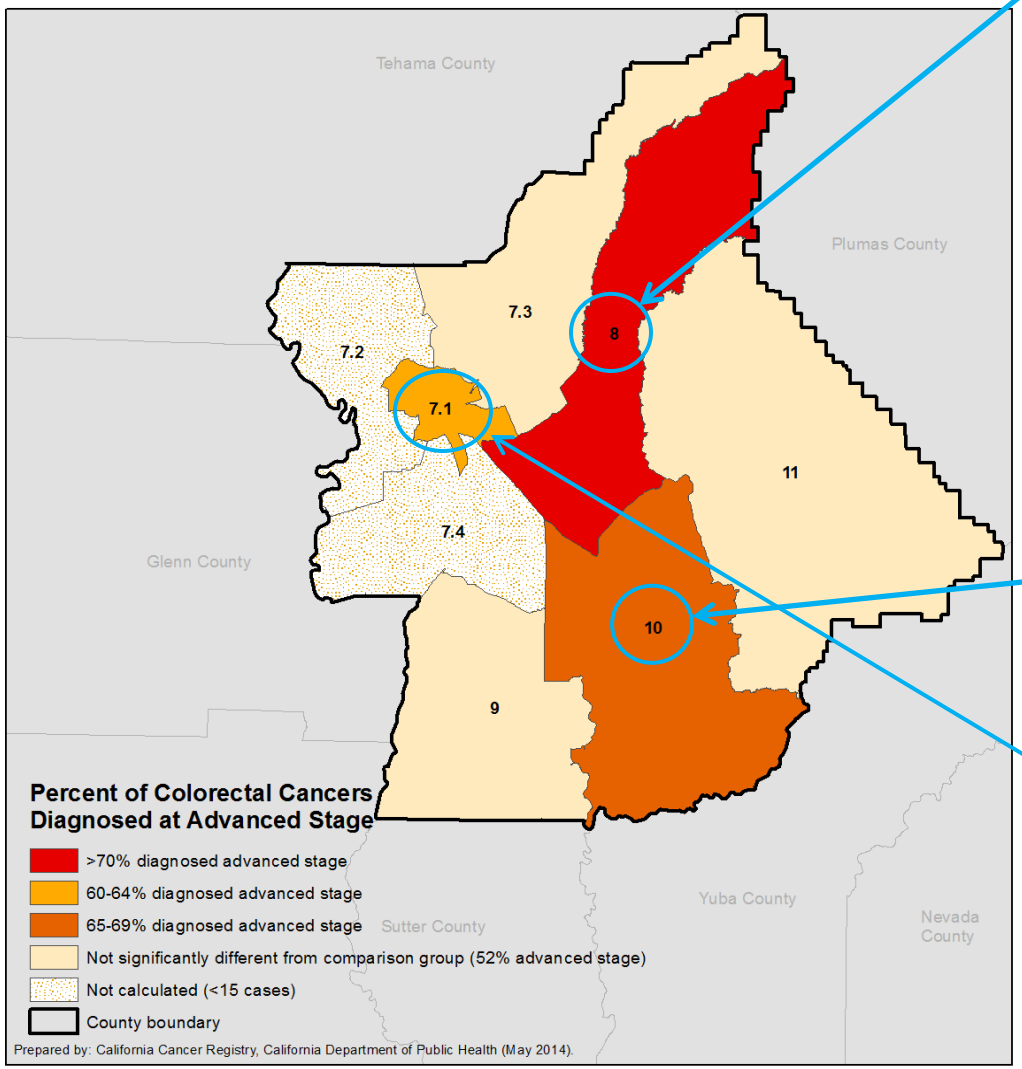
Orange: 60-64% of cases diagnosed at advanced stage

Beige: % of advanced stage not significantly different from comparison group

White: not calculated (<15 cases in five-year period)



Advanced Stage Colorectal Cancer in Butte County Communities Among Adults 50 Years and Older, 2007-2011



Butte County:

MSSA 8: Magalia/Paradise/ Stirling City

124 total cases

89 advanced stage

Demographic characteristics:

- 14% living at 100% FPL*

MSSA 10: Oroville/Palmero/ Thermalito

100 total cases

67 advanced stage

Demographic characteristics:

- 83% non-Hispanic white
- 13% Hispanic ethnicity
- 22% living at or <100% FPL*

Primary Care Shortage Areas

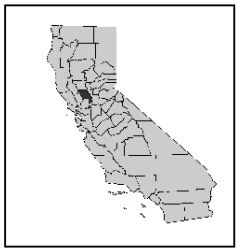
MSSA 7.1: Chapmantown/Chico

- 63% of colorectal cancer cases diagnosed advanced stage

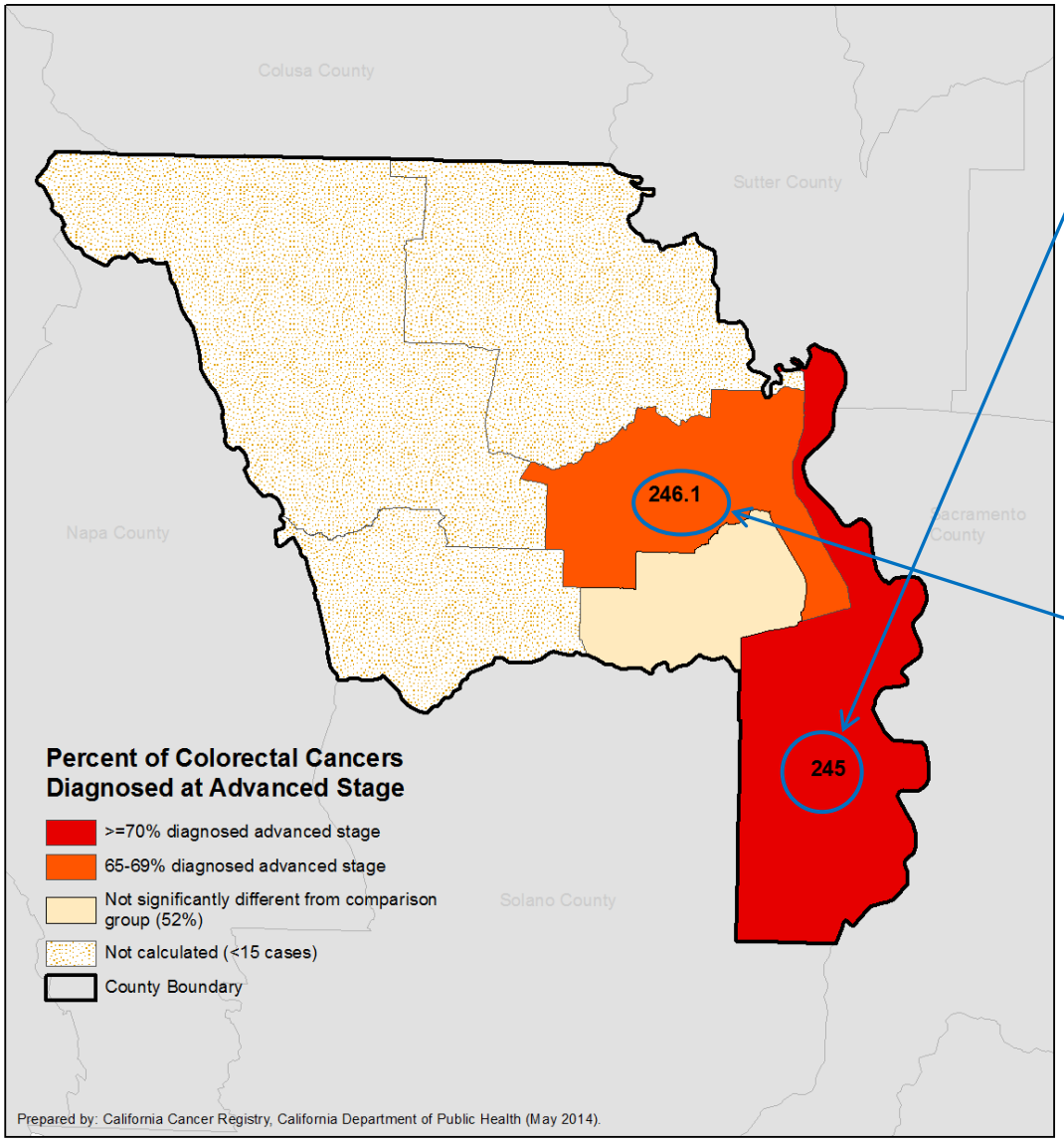
Demographic characteristics:

- 21% living at or <100% FPL*

* Federal Poverty Level



Advanced Stage Colorectal Cancer in Yolo County Communities Among Adults 50 Years and Older, 2007-2011



Yolo County:

MSSA 245: Bryte/ Broderick/Clarksburg/ Riverview/West Sacramento

81 total cases

57 advanced stage

Demographic profile:

- Urban
- Diverse; large Hispanic pop.
- Primary care shortage area

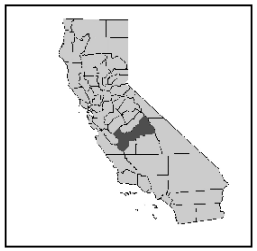
MSSA 246.1: Woodland

96 total cases

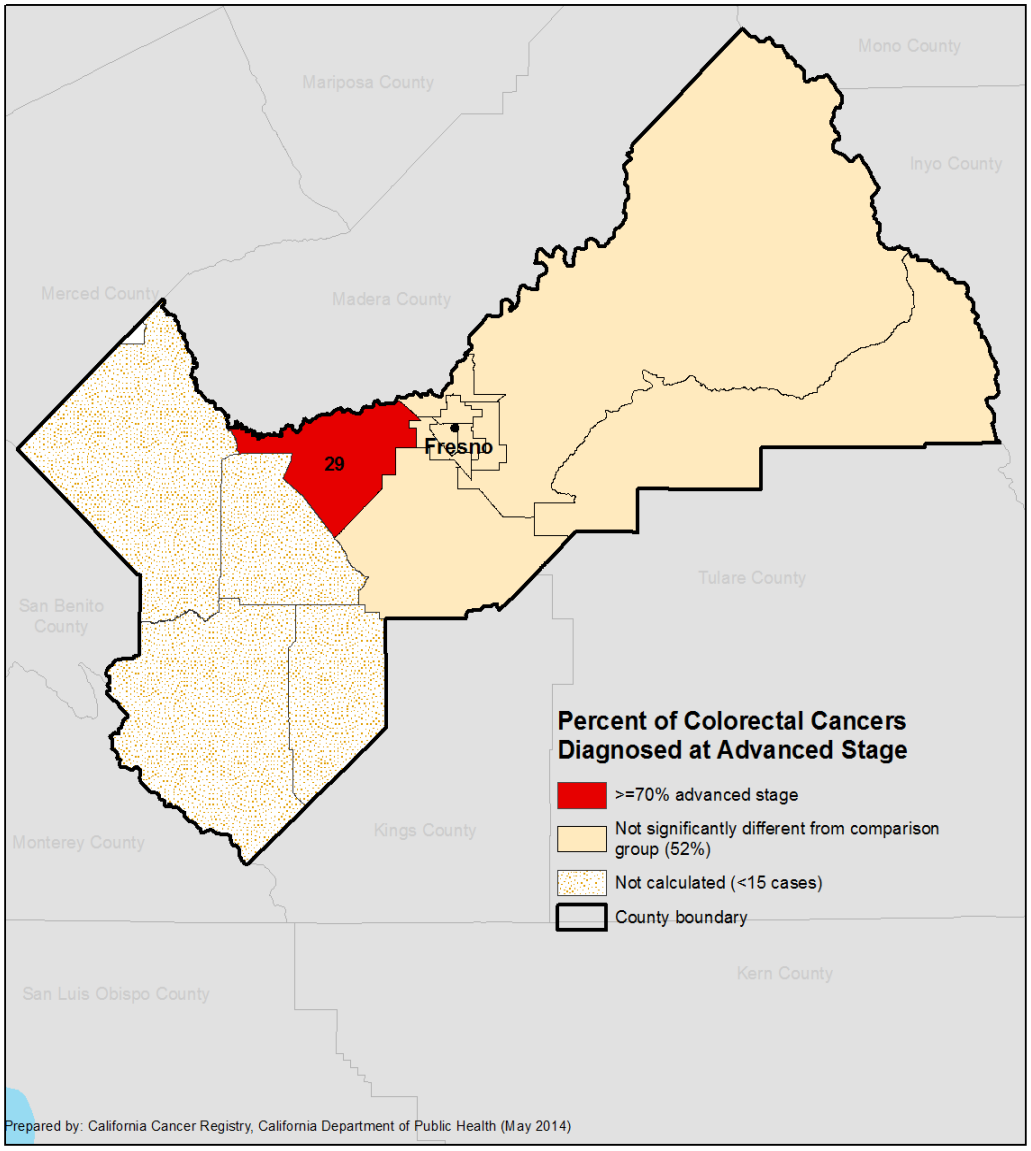
66 advanced stage

Demographic profile:

- Urban
- Diverse; large Hispanic pop.



Advanced Stage Colorectal Cancer in Communities of Fresno County Among Adults 50 Years and Older, 2007-2011



Fresno County:

MSSA 29: Biola/Herndon/ Highway City/Kerman

51 total cases

36 advanced stage

71% advanced stage diagnoses

Demographic characteristics:

Racial/ethnic distribution

72% white

62% Hispanic ethnicity

22% of the population lives <=100 FPL*

Rural community

Primary Care Shortage Area

*Federal Poverty Level

Why do some communities have more cases diagnosed at advanced stage?

These maps tell us where, but not why.

Possible reasons:

- Population characteristics (i.e., poverty, lack of insurance, education level)
- Community characteristics (i.e., number of doctors doing screening, rural area with few services)
- Chance

Interpreting the maps: cautions

- These maps do not compare overall colorectal cancer incidence rates by community
- They do not suggest any information about underlying causes of colorectal cancer
- They do not suggest that communities with no statistically significant excess of advanced stage colorectal cancers should be ignored
- The maps should not be used in isolation
- They are the beginning of the discussion – not the end

Summary

- Colorectal cancer incidence and mortality rates have declined, but not among all groups.
- More than half of colorectal cancers in California are diagnosed at advanced stage, regardless of race, ethnicity, and socioeconomic status.
- Maps can be used to identify geographic variations in stage distribution.
- Results need to be interpreted in conjunction with local knowledge.
- Percent late stage does not tell the whole story.

California Cancer Registry Services and Reports

Jennifer Rico, MA
California Cancer Registry
Chronic Disease Surveillance and Research Branch
California Department of Public Health

Overview

- California Cancer Registry (CCR) Data Overview
- Reports and publications
- Annual Statistical Tables and the Data and Mapping Tool

What info does CCR collect?

- CCR collects demographic, diagnostic, and treatment information on individual cancer cases
- Demographic data include: patient's name, address at time of diagnosis, sex, race, and age at diagnosis.
- Diagnostic data include: type of cancer (such as breast cancer) and stage of disease at time of diagnosis.
- Treatment data include: whether the patient had surgery, radiation, or chemotherapy as the first course of treatment.

Data CCR does NOT collect

- CCR does NOT collect the following information:
  - Individuals' cancer screening history (e.g., mammograms, colonoscopies)
  - Cancer recurrence
  - Statewide cancer screening rates

What are the data used for?

CCR data are used to:

- Monitor the number of new cancer cases and cancer deaths over time;
- Examine disparities in cancer risk, treatment and survival;
- Examine treatment choices and other predictors of survival;
- Measure the success of cancer screening programs;
- Respond to public concerns and questions about cancer; and
- Conduct research to find the causes and cures of cancer.

Researchers have used CCR data to:

- Analyze geographic, racial/ethnic, and occupational differences in cancer risk;
- Evaluate the quality of medical care received by cancer patients; and
- Examine patient survival with respect to cancer type, extent of the disease, demographic characteristics, and other important factors.
- Conduct patient contact studies to collect additional patient data and/or biospecimens.

Primary source of data

CCR is the primary source of data for California cancer statistics.

CCR data is provided to:

- American Cancer Society (ACS) Facts and Figures
- SEER – Surveillance Epidemiology and End Results
- CDC – Centers for Disease Control and Prevention
- NAACCR – North American Association of Central Cancer Registries

California Cancer Facts & Figures 2015

A sourcebook of cancer data for cancer prevention and control activities in California

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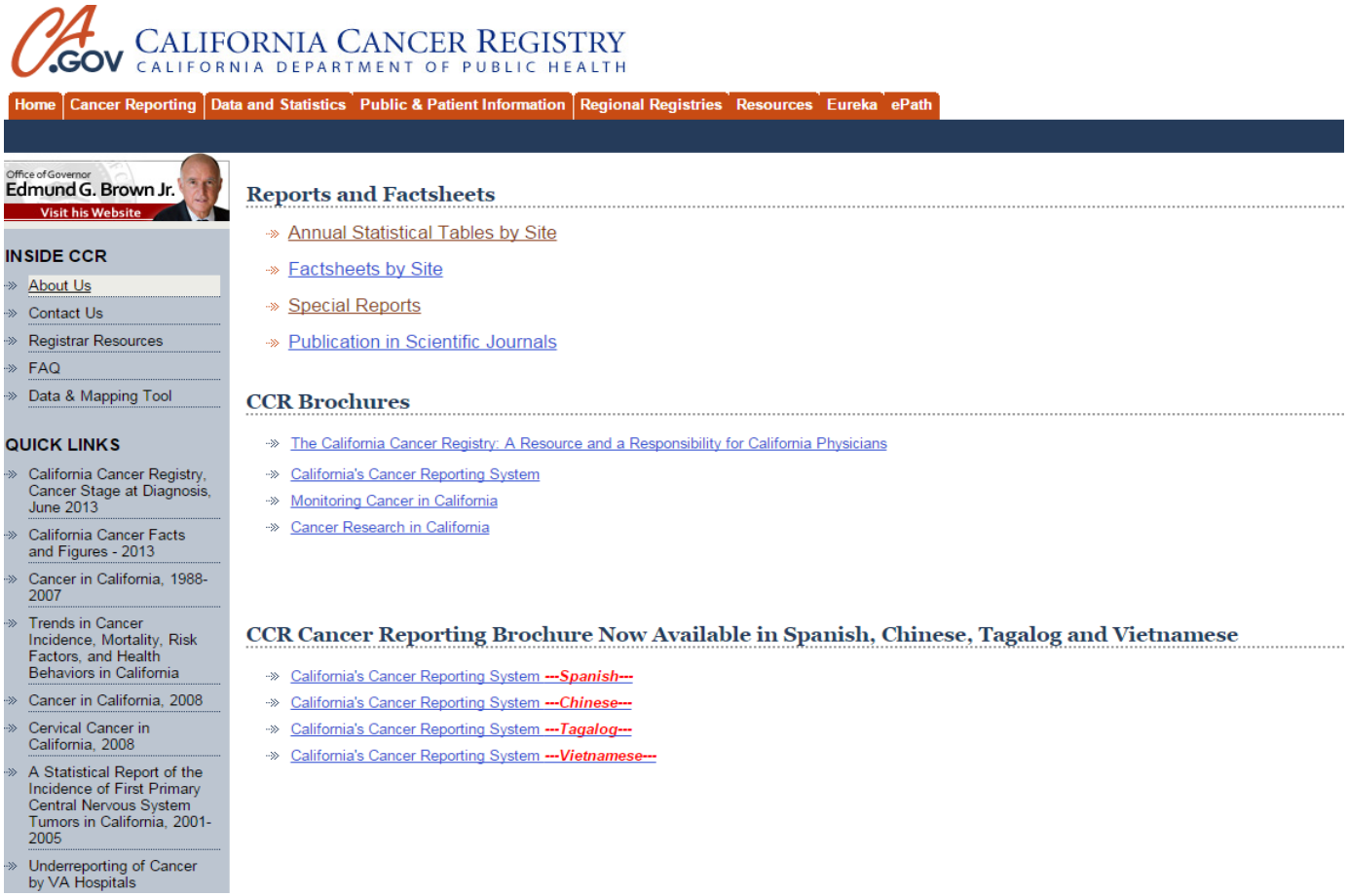
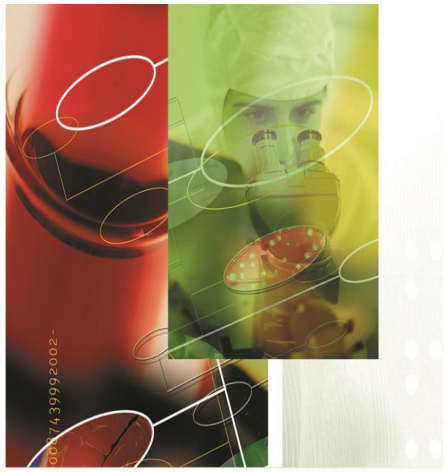
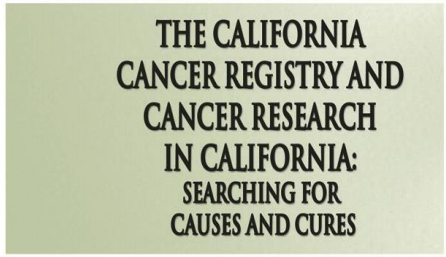
American Cancer Society®

CCR Reports and Publications






THE
CALIFORNIA
CANCER REGISTRY:
CALIFORNIA'S CANCER
REPORTING SYSTEM


THE CALIFORNIA
CANCER REGISTRY AND
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SEARCHING FOR
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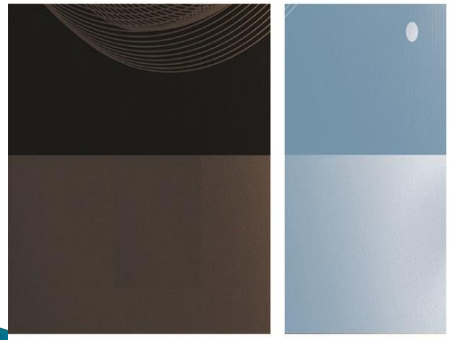

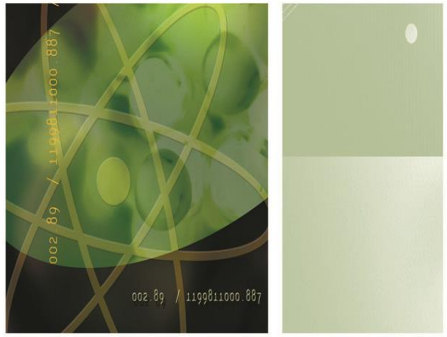

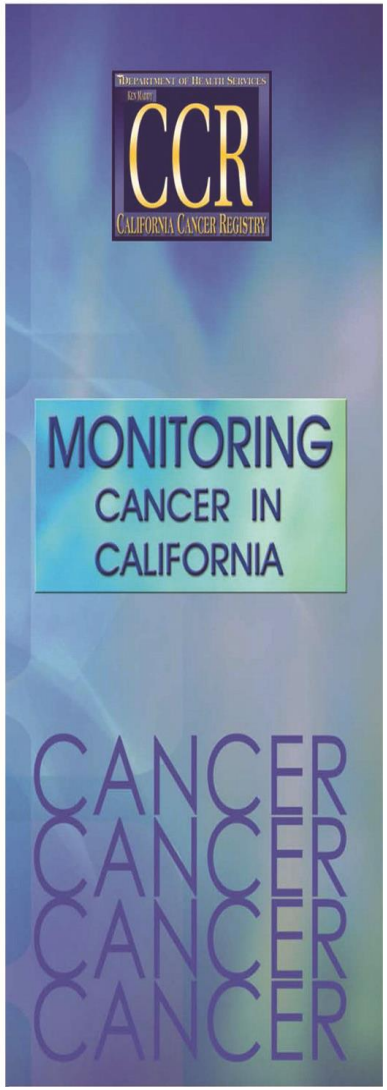
CCR
CALIFORNIA CANCER REGISTRY
MONITORING
CANCER IN
CALIFORNIA
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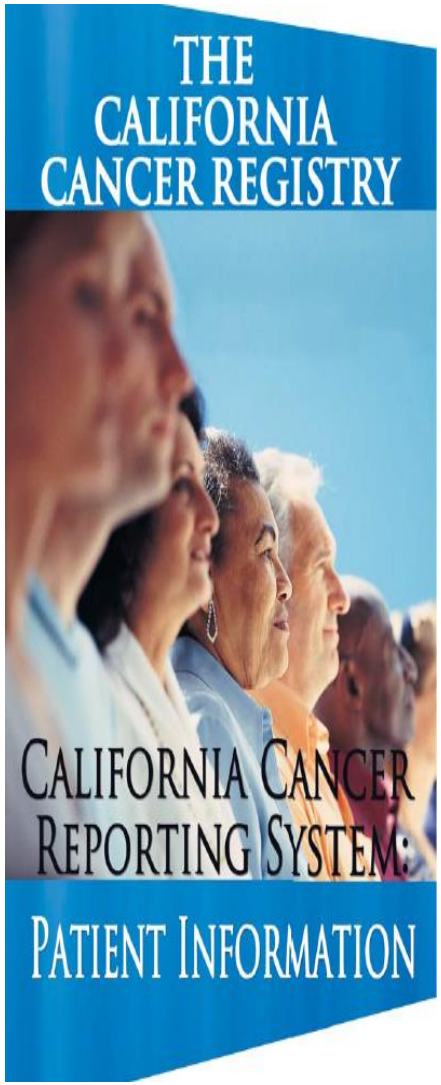
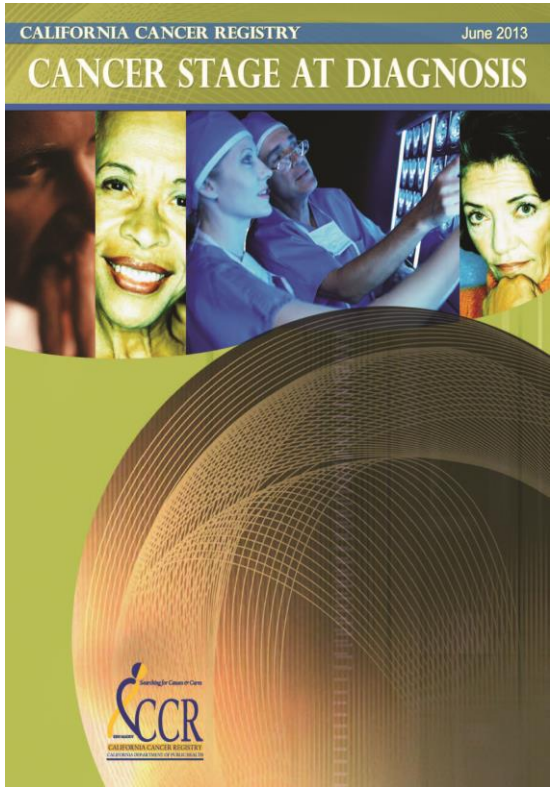
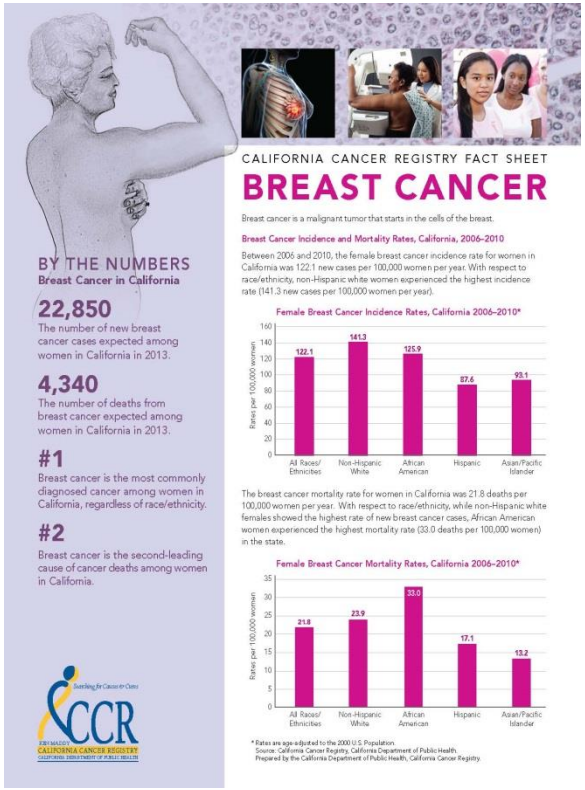
CANCER

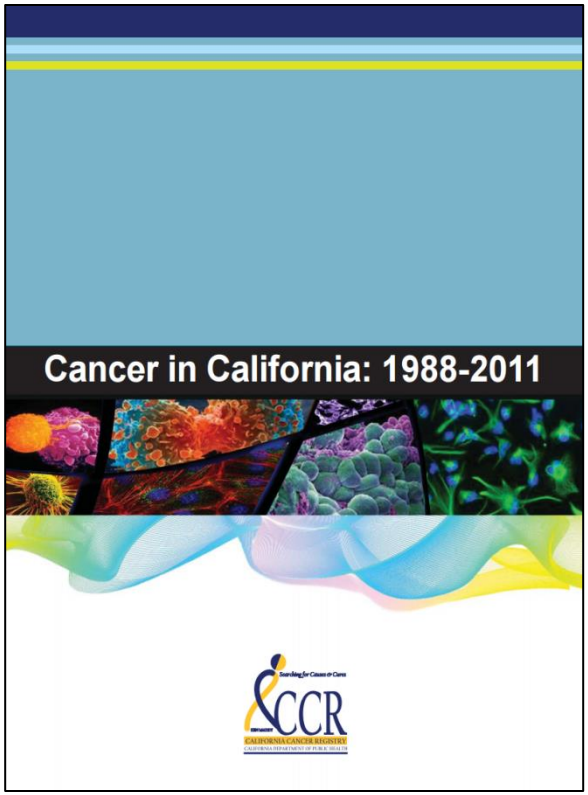

THE
CALIFORNIA
CANCER REGISTRY
CALIFORNIA CANCER
REPORTING SYSTEM:
PATIENT INFORMATION

CCR Reports and Publications

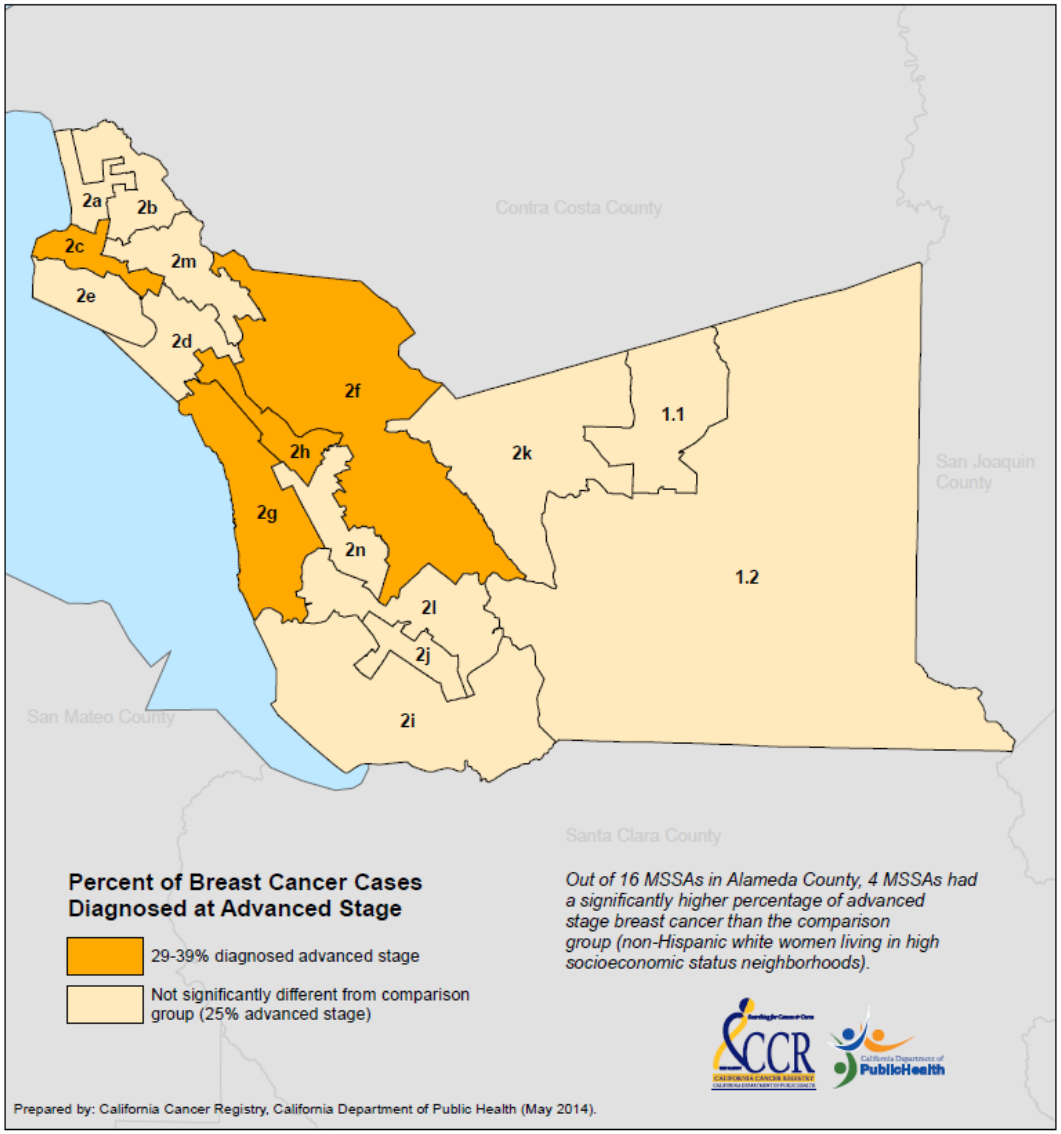
CCR Website: www.ccrcal.org







Advanced Stage Breast Cancer in Communities of Alameda County Among Women 40 Years and Older, by MSSA, 2007-2011



Data and Mapping Tool

How can you access data on the cancer rates in California and/or in your county?

- Some data from CCR is available to the public and can be used for such purposes as research, program planning, and grant applications.
- CCR has an online data and mapping tool that will allow you to generate customized maps and tables of California cancer incidence or mortality rates by sex, race/ethnicity, and by county (for individual counties that have populations large enough to produce stable rates).

www.ccrcal.org/Data_and_Statistics/index.shtml

www.cancer-rates.info/ca/

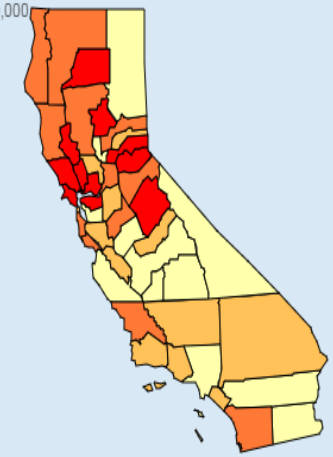
California Cancer Registry

Age-Adjusted Invasive Cancer Incidence Rates in California

All Sites, 2008 - 2012
By County
Age-Adjusted to the 2000 U.S. Standard Population

California Rate: 424.94 / per 100,000

- 380.95 - 415.92
- 418.57 - 433.02
- 433.38 - 454.30
- 456.29 - 489.19



Specify your criteria History

Data Source Invasive Cancer Incidence
Geography County
Cancer Site All Sites
Year Start 2008 | Year End 2012
Sex All | Race/Ethnicity All
Standard 2000 U.S. Standard Population

Redraw

All rates per 100,000. Based on November 2014 Extract (Released November 21, 2014). Last accessed Nov 12, 2015. © 2015 California Cancer Registry.

Region	Population at Risk	Cases	Crude Rate	Age-adjusted Rate	95% Confidence Interval
Butte	1099654	6480	589.28	489.19	[477.00, 501.62]
Napa	682952	4074	596.53	488.89	[473.68, 504.49]
Shasta	888095	5540	623.81	478.79	[465.89, 491.99]
Marin	1263250	8124	643.10	475.00	[464.36, 485.84]
Solano	2070476	10083	486.99	472.33	[462.94, 481.87]
Mariposa - Tuolumne	367049	2637	718.43	467.68	[449.13, 486.90]
Sonoma	2415413	13237	548.02	463.42	[455.31, 471.64]
Placer	1749881	9738	556.49	460.52	[451.28, 469.91]

For more information

Email:
jennifer.rico@cdph.ca.gov

California Cancer Registry:
www.ccrcal.org

Maps & Tables:
http://www.ccrcal.org/Data_and_Statistics/CRC/MapData.shtml

Question and Answer Session

Contact Information

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E-mail: LeeAnn.King@cdph.ca.gov

California Cancer Registry:

Website: www.ccrcal.org E-mail: webmaster@ccr.ca.gov

California Colorectal Cancer Control Program:

E-mail: contactC4P@cdph.ca.gov

Public Health Survey and Research Program:

E-mail: PHSRP@csus.edu

CDPH California Department of PublicHealth